

Claims

1. A mobile telecommunications device comprising a casing, an earpiece, and a cover associated with the earpiece to define a resonant cavity between the earpiece and the casing, wherein the cover has an opening therein for the transmission of sound from the earpiece via the cavity into an acoustic path formed between the casing and the cover.

2. A mobile telephone according to claim 1, wherein the acoustic path extends laterally away from the earpiece between the casing and the cover.

3. A mobile telecommunications device according to claim 1, wherein the cover is spaced from the earpiece by a gasket.

4. A mobile telecommunications device according to claim 1, wherein the earpiece is mounted to a substrate and the cover is a metal plate that extends over the substrate.

5. A mobile telecommunications device according to claim 4, wherein the substrate is a lightguide assembly.

6. A mobile telecommunications device according to claim 4, wherein the resonant cavity is partially formed by a depression in the plate.

7. A mobile telecommunications device according to claim 1, wherein the acoustic path between the casing and the cover is configured to increase internal leak of sound generated by the earpiece to improve the leak tolerance of the device.

8. A mobile telecommunications device according to claim 1, wherein the casing has a plurality of apertures therein for the external transmission of sound from the device via the resonant cavity and the acoustic path.

9. A mobile telecommunications device according to claim 8, wherein the casing is interchangeable with one or more other casings each having a plurality of apertures therein for the external transmission of sound from the device, the number and/or arrangement of apertures in each casing being different and the resonant cavity and the acoustic path being configured so that the acoustic response of the earpiece remains substantially the same irrespective of which casing attached to the device.

10. A mobile telecommunications device according to claim 1, comprising a mobile telephone.

11. A method of manufacturing a mobile telecommunications device comprising a casing, an earpiece, and a cover associated with the earpiece to define a resonant cavity between the earpiece and the casing, wherein the method includes the step of tuning the cover to the frequency of the earpiece such that the configuration of the casing has substantially no effect on the acoustic response of the earpiece.

12. A method of manufacturing a mobile telephone according to claim 11.